STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243

OPERATING PERMIT Issued Pursuant to Tennessee Air Quality Act

Date Issued: August 3, 2015

Permit Number: 070165P

Date Expires: July 1, 2025

Issued To:
Tennessee Department of Transportation
– Jackson District Facility

Installation Address:
200 Benchmark Place
Jackson

Installation Description:
Four (4) Internal Combustion Diesel
Fuel-Fired Emergency Engines for Generators

Emission Source Reference No.
57-0392-01, 02, 04, 05
NSPS (subpart IIII)
NESHAP (subpart ZZZZ)

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The applications that were utilized in the preparation of this permit are dated April 16, 2015 and are signed by John W. Nichols, Facility Compliance Coordinator for the permitted facility. If this person terminates employment or is reassigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

Barry R. Stephens
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

2. The emergency engines are subject to regulation under 40 CFR Part 63, Subpart ZZZZ, **NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.** Pursuant to 40 CFR 63.6590(c), the permittee shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ, by meeting the requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for the emergency engines under 40 CFR Part 63, Subpart ZZZZ.

   TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ

3. Visible emissions from each of these sources shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

   TAPCR 1200-03-05-.03(6) and TAPCR 1200-03-05-.01(1)

4. These sources shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards.

   TAPCR 1200-03-09-.03(8)

5. These sources shall operate in accordance with the terms of this permit and the information submitted in the approved permit applications.

   TAPCR 1200-03-09-.01(1)(d)

6. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit expiration date, pursuant to Division Rule 1200-03-09-.02(3).

7. The permittee shall keep a log of the number of operating hours for each calendar year, in a form that readily demonstrates compliance with the operating hours restrictions in **Conditions 16 and 17; 29 and 30; 40 and 41; & 52 and 53** for each engine (see example below). All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required. The permittee shall retain this record at the source location for a period of not less than two (2) years and keep this record available for inspection by the Technical Secretary or their representative.

Year:	Engine/Emission source reference number:			
	Operating Hours per Calendar Year			**Comments****
Month	**Maintenance checks & readiness testing**	**Other non-emergency operation**	**Emergency operation**	
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
Totals				

** The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. Additionally, the permittee must also document the date, start time, and end time if/when an engine is operated for any of the purposes specified in either **Conditions 16(b) or (c); 29(b) or (c); 40(b) or (c); and/or 52(b) or (c); or Conditions 17(a); 30(a); 41(a); and/or 53(a).**

Source Specific Conditions

57-0392-01 Compression Ignition Emergency Engine (300 hp) **NSPS, Subpart IIII**

Conditions 8 through 21 apply to source 57-0392-01

8. The stated design power output capacity for the internal combustion engine is 300 horsepower (hp). Any increase in this capacity will require a construction permit.

   TAPCR 1200-03-09-.01(1)(d) and the application dated August 29, 2014

9. New (manufactured after April 1, 2006) stationary compression ignition engines are subject to regulations under 40 CFR Part 60, Subpart IIII, **STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES** including any and/or all applicable emission limitations, notifications, compliance options, records, reports, etc. including, but not limited to, the requirements in **Conditions 10 – 21** that follow.

Engine Make/Model	Engine Model YR	Engine Power (br-hp)
John Deere, 6081AF001	2006	300

10. Nitrogen oxides (NO_x) emitted by this source shall not exceed 9.2 grams per kW-hour (4.54 lbs/hr). Compliance with this limit shall be indicated by compliance with **Conditions 18 and 19**.

    This emission limitation is established pursuant to §60.4205(a).

11. Carbon monoxide (CO) emitted by this source shall not exceed 11.4 grams per kW-hour (5.62 lbs/hr). Compliance with this limit shall be indicated by compliance with **Conditions 18 and 19**.

    This emission limitation is established pursuant to §60.4205(a).

12. Particulate matter (PM) emitted by this source shall not exceed 0.54 grams per kW-hour (0.27 lbs/hr). Compliance with this limit shall be indicated by compliance with **Conditions 18 and 19**.

    This emission limitation is established pursuant to §60.4205(a).

13. Hydrocarbons (HC) emitted by this source shall not exceed 1.3 grams per kW-hour (0.64 lbs/hr). Compliance with this limit shall be indicated by compliance with **Conditions 18 and 19**.

    This emission limitation is established pursuant to §60.4205(a).

14. The permittee must use diesel fuel that meets the requirements of §60.4207(b) and §80.510(b). The diesel fuel used for this source is subject to the following per-gallon standards:

    (a) Sulfur content of 15 ppm maximum.
    (b) A minimum cetane index of 40; or a maximum aromatic content of 35 volume percent.

    The permittee shall maintain purchase receipts, vendor certifications, material safety data sheets, or other records to demonstrate that all fuel purchased for this source meets the requirements of this condition (any fuel labeled as ultra-low sulfur non-highway diesel fuel or ultra-low sulfur highway diesel fuel meets these requirements). These records shall be made available to the Technical Secretary for inspection upon request. These records must be maintained for a period of at least (2) years from the purchase date.

15. Pursuant to §60.4206, the permittee must operate and maintain the emergency stationary ICE and control device (if present) to achieve the emission standards as required in **Conditions 10 – 13** over the entire life of the engine.

16. Pursuant to §60.4211(f)(2), the emergency stationary ICE may be operated for any combination of the purposes specified in (a) through (c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as specified in **Condition 17**, counts as part of the 100 hours per calendar year.

    (a) The emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing beyond 100 hours per calendar year.
    (b) The emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.
    (c) The emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

17. Pursuant to §60.4211(f)(3)(i), the emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing, emergency demand response, and voltage and frequency deviation, as specified in **Condition 16**. Except as provided in (a) below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

    (a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions (i) through (v) are met:

        (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
        (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
        (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
        (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
        (v) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee.

18. Pursuant to 40 CFR §60.4211(a) the permittee must operate and maintain the emergency stationary ICE and control device (if present) according to the manufacturer's emission-related written instructions, change only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply, except as permitted in **Condition 20**.

19. Pursuant to 40 CFR §60.4211(b), the permittee must demonstrate compliance with the emission standards in § 60.4205(a) (**Conditions 10 – 13**) according to one of the methods specified below:

(a) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
(b) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
(c) Keeping records of engine manufacturer data indicating compliance with the standards.
(d) Keeping records of control device vendor data indicating compliance with the standards.
(e) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.

20. Pursuant to §60.4211(g)(2), if the stationary ICE and control device (if present) is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the emission-related settings are changed in a way not permitted by the manufacturer.

21. Pursuant to §60.4214(d), if the emergency stationary CI ICE operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in **Condition 16(b) and (c)** or that operates for the purposes specified in **Condition 17(a)**, the permittee must submit an annual report according to the requirements in (a) through (c) below.

(a) The report must contain the following information:

(i) Company name and address where the engine is located.
(ii) Date of the report and beginning and ending dates of the reporting period.
(iii) Engine site rating and model year.
(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
(v) Hours operated for the purposes specified in **Condition 16(b) and (c)**, including the date, start time, and end time for engine operation for the purposes specified in **Condition 16(b) and (c)**.
(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in **Condition 16(b) and (c)**.
(vii) Hours spent for operation for the purposes specified in **Condition 17(a)**, including the date, start time, and end time for engine operation for the purposes specified in **Condition 17(a)**. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(b) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
(c) The annual report must be submitted to the Technical Secretary at the following addresses:

Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243

Or by email to Air.Pollution.Control@tn.gov

57-0392-02 Compression Ignition Emergency Engine (36.3 hp) **NSPS, Subpart IIII**

Conditions 22 through 33 apply to source 57-0392-02

22. The stated design power output capacity for the internal combustion engine is 36.3 horsepower (hp). Any increase in this capacity will require a construction permit.

TAPCR 1200-03-09-.01(1)(d) and the application dated August 29, 2014

23. New (manufactured after April 1, 2006) stationary compression ignition engines are subject to regulations under 40 CFR Part 60, Subpart IIII, **STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES** including any and/or all applicable emission limitations, notifications, compliance options, records, reports, etc. including, but not limited to, the requirements in **Conditions 24 – 33** that follow.

Engine Make/Model	Engine Model YR	Engine Power (br-hp)
Yanmar, 4TNV84T	2006	36.3

24. Nonmethane hydrocarbons plus nitrogen oxides ($NMHC+NO_x$) emitted by this source shall not exceed 9.5 grams per kW-hour (0.57 lbs/hr). Compliance with this limit shall be indicated by compliance with **Conditions 31 and 32**.

This emission limitation is established pursuant to §60.4205(a).

25. Carbon monoxide (CO) emitted by this source shall not exceed 5.5 grams per kW-hour (0.33 lbs/hr). Compliance with this limit shall be indicated by compliance with **Conditions 31 and 32**.

This emission limitation is established pursuant to §60.4205(a).

26. Particulate matter (PM) emitted by this source shall not exceed 0.80 grams per kW-hour (0.05 lbs/hr). Compliance with this limit shall be indicated by compliance with **Conditions 31 and 32**.

This emission limitation is established pursuant to §60.4205(a).

27. The permittee must use diesel fuel that meets the requirements of §60.4207(b) and §80.510(b). The diesel fuel used for this source is subject to the following per-gallon standards:

(a) Sulfur content of 15 ppm maximum.
(b) A minimum cetane index of 40; or a maximum aromatic content of 35 volume percent.

The permittee shall maintain purchase receipts, vendor certifications, material safety data sheets, or other records to demonstrate that all fuel purchased for this source meets the requirements of this condition (any fuel labeled as ultra-low sulfur non-highway diesel fuel or ultra-low sulfur highway diesel fuel meets these requirements). These records shall be made available to the Technical Secretary for inspection upon request. These records must be maintained for a period of at least (2) years from the purchase date.

28. Pursuant to §60.4206, the permittee must operate and maintain the emergency stationary ICE and control device (if present) to achieve the emission standards as required in **Conditions 24 – 26** over the entire life of the engine.

29. Pursuant to §60.4211(f)(2), the emergency stationary ICE may be operated for any combination of the purposes specified in (a) through (c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as specified in **Condition 30**, counts as part of the 100 hours per calendar year.

(a) The emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing beyond 100 hours per calendar year.
(b) The emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.
(c) The emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

30. Pursuant to §60.4211(f)(3)(i), the emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing, emergency demand response, and voltage and frequency deviation, as specified in **Condition 29**. Except as provided in (a) below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions (i) through (v) are met:

(i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
(ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
(iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
(iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
(v) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee.

31. Pursuant to 40 CFR §60.4211(a) the permittee must operate and maintain the emergency stationary ICE and control device (if present) according to the manufacturer's emission-related written instructions, change only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply, except as permitted in **Condition 33**.

32. Pursuant to 40 CFR §60.4211(b), the permittee must demonstrate compliance with the emission standards in § 60.4205(a) (**Conditions 24 – 26**) according to one of the methods specified below:

(a) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
(b) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
(c) Keeping records of engine manufacturer data indicating compliance with the standards.

(d) Keeping records of control device vendor data indicating compliance with the standards.
(e) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.

33. Pursuant to §60.4211(g)(1), if the stationary ICE and control device (if present) is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the engine and control device are not installed and configured according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

57-0392-04 Compression Ignition Emergency Engine (66 hp) **NSPS, Subpart IIII**

Conditions 34 through 44 apply to source 57-0392-04

34. The stated design power output capacity for the internal combustion engine is 66 horsepower (hp). Any increase in this capacity will require a construction permit.

TAPCR 1200-03-09-.01(1)(d) and the application dated August 29, 2014

35. Particulate matter emitted from the engine at this source shall not exceed 0.6 pounds per million British Thermal Units heat input (0.28 lb/hr, based on an average brake specific fuel consumption of 7,000 Btu/hp-hr).

TAPCR 1200-03-06-.02(2)(b).

36. New (manufactured after April 1, 2006) stationary compression ignition engines are subject to regulations under 40 CFR Part 60, Subpart IIII, **STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES** including any and/or all applicable emission limitations, notifications, compliance options, records, reports, etc. including, but not limited to, the requirements in **Conditions 37 – 44** that follow.

Engine Make/Model	Engine Model YR	Engine Power (br-hp)
John Deere, 4039D	2006	66

37. Nitrogen oxides (NO_x) emitted by this source shall not exceed 9.2 grams per kW-hour (1.00 lbs/hr). Compliance with this limit shall be indicated by compliance with **Conditions 42 and 43**.

This emission limitation is established pursuant to §60.4205(a).

38. The permittee must use diesel fuel that meets the requirements of §60.4207(b) and §80.510(b). The diesel fuel used for this source is subject to the following per-gallon standards:

(a) Sulfur content of 15 ppm maximum.
(b) A minimum cetane index of 40; or a maximum aromatic content of 35 volume percent.

The permittee shall maintain purchase receipts, vendor certifications, material safety data sheets, or other records to demonstrate that all fuel purchased for this source meets the requirements of this condition (any fuel labeled as ultra-low sulfur non-highway diesel fuel or ultra-low sulfur highway diesel fuel meets these requirements).

These records shall be made available to the Technical Secretary for inspection upon request. These records must be maintained for a period of at least (2) years from the purchase date.

39. Pursuant to §60.4206, the permittee must operate and maintain the emergency stationary ICE and control device (if present) to achieve the emission standard as required in **Condition 37** over the entire life of the engine.

40. Pursuant to §60.4211(f)(2), the emergency stationary ICE may be operated for any combination of the purposes specified in (a) through (c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as specified in **Condition 41**, counts as part of the 100 hours per calendar year.

(d) The emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing beyond 100 hours per calendar year.

(e) The emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.

(f) The emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

41. Pursuant to §60.4211(f)(3)(i), the emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing, emergency demand response, and voltage and frequency deviation, as specified in **Condition 40**. Except as provided in (a) below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions (i) through (v) are met:

(i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(iv) The power is provided only to the facility itself or to support the local transmission and distribution system.

(v) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee.

42. Pursuant to 40 CFR §60.4211(a) the permittee must operate and maintain the emergency stationary ICE and control device (if present) according to the manufacturer's emission-related written instructions, change only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply, except as permitted in **Condition 44**.

43. Pursuant to 40 CFR §60.4211(b), the permittee must demonstrate compliance with the emission standard in § 60.4205(a) (**Condition 37**) according to one of the methods specified below:

(f) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
(g) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
(h) Keeping records of engine manufacturer data indicating compliance with the standards.
(i) Keeping records of control device vendor data indicating compliance with the standards.
(j) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.

44. Pursuant to §60.4211(g)(1), if the stationary ICE and control device (if present) is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the engine and control device are not installed and configured according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

57-0392-05 Compression Ignition Emergency Engine (51 hp) **NSPS, Subpart IIII**

Conditions 45 through 55 apply to source 57-0392-05

45. The stated design power output capacity for the internal combustion engine is 51 horsepower (hp). Any increase in this capacity will require a construction permit.

TAPCR 1200-03-09-.01(1)(d) and the application dated August 29, 2014

46. New (manufactured after April 1, 2006) stationary compression ignition engines are subject to regulations under 40 CFR Part 60, Subpart IIII, **STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES** including <u>any and/or all applicable</u> emission limitations, notifications, compliance options, records, reports, etc. including, but not limited to, the requirements in **Conditions 47 – 55** that follow.

Engine Make/Model	Engine Model YR	Engine Power (br-hp)
Generac SD020	2007	51

47. Nonmethane hydrocarbons plus nitrogen oxides (NMHC+NO_x) emitted by this source shall not exceed 7.5 grams per kW-hour (0.63 lbs/hr). Compliance with this limit shall be indicated by compliance with **Condition 54**.

This emission limitation is established pursuant to §60.4205(b).

48. Carbon monoxide (CO) emitted by this source shall not exceed 5.0 grams per kW-hour (0.42 lbs/hr). Compliance with this limit shall be indicated by compliance with **Condition 54**.

This emission limitation is established pursuant to §60.4205(b).

49. Particulate matter (PM) emitted by this source shall not exceed 0.40 grams per kW-hour (0.03 lbs/hr). Compliance with this limit shall be indicated by compliance with **Condition 54**.

This emission limitation is established pursuant to §60.4205(b).

50. The permittee must use diesel fuel that meets the requirements of §60.4207(b) and §80.510(b). The diesel fuel used for this source is subject to the following per-gallon standards:

(a) Sulfur content of 15 ppm maximum.
(b) A minimum cetane index of 40; or a maximum aromatic content of 35 volume percent.

The permittee shall maintain purchase receipts, vendor certifications, material safety data sheets, or other records to demonstrate that all fuel purchased for this source meets the requirements of this condition (any fuel labeled as ultra-low sulfur non-highway diesel fuel or ultra-low sulfur highway diesel fuel meets these requirements). These records shall be made available to the Technical Secretary for inspection upon request. These records must be maintained for a period of at least (2) years from the purchase date.

51. Pursuant to §60.4206, the permittee must operate and maintain the emergency stationary ICE and control device (if present) to achieve the emission standards as required in **Conditions 47 – 49** over the entire life of the engine.

52. Pursuant to §60.4211(f)(2), the emergency stationary ICE may be operated for any combination of the purposes specified in (a) through (c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as specified in **Condition 53**, counts as part of the 100 hours per calendar year.

(a) The emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing beyond 100 hours per calendar year.
(b) The emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.
(c) The emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

53. Pursuant to §60.4211(f)(3)(i), the emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing, emergency demand response, and voltage and frequency deviation, as specified in **Condition 52**. Except as provided in (a) below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions (i) through (v) are met:

(i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
(ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
(iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
(v) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee.

54. Pursuant to 40 CFR §60.4211(a) and (c), the permittee must comply by purchasing an engine certified to the emission standards in § 60.4205(b) (**Conditions 47 – 49**) for the same model year and maximum engine power. The permittee must do all of the following, except as provided in **Condition 55**:

(a) Install and configure the engine according to the manufacturer's emission-related specifications;
(b) Operate and maintain the emergency stationary ICE and control device (if present) according to the manufacturer's emission-related written instructions;
(c) Change only those emission-related settings that are permitted by the manufacturer; and
(d) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply.

55. Pursuant to §60.4211(g)(1), if the stationary ICE and control device (if present) is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the engine and control device are not installed and configured according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

(end of conditions)
